

4. (Previously amended ) The method of claim 1 wherein the step of examining each program line in said second node to determine if it negates the possibility of combining nodes, comprises the step of analyzing each said program line to determine if there are dependent texture references.

5. (Original ) The method of claim 1 wherein the step of examining each program line in said second node to determine if it negates the possibility of combining nodes, comprises the step of analyzing each said program line to determine if there is a reference to a texture that depends upon the output of said first node and said reference is located at coordinates stored in a register.

6. (Original ) The method of claim 1 wherein the step of determining whether the output buffer of said first node will comprise data that is similar to the input texture of said second node, comprises the step of determining if the image pixels represented by the output of said first node are the same as the image pixels represented by the input of said second node.

7. (Previously amended) A method of determining if a first fragment program may be combined with a second fragment program, where each said program is for processing a single graphic element, the method comprising the steps of:

determining whether an output of the first fragment program represents relevant pixels that are the same pixels represented by an input of the second fragment program;

examining each program line in said second program to determine if it negates the possibility of combining said two programs; and

editing program code to replace at least one texture reference with a register reference.

8. (Original) The method of claim 7 wherein the step of examining each program line in said second program to determine if it negates the possibility of combining programs comprises the step of renaming local variables.

9. (Original) The method of claim 7 wherein the step of examining each program line in said second program to determine if it negates the possibility of combining programs comprises the step of renaming textures.

10. (Original) The method of claim 7 wherein the step of examining each program line in said second program to determine if it negates the possibility of combining programs, comprises the step of determining if there are dependent texture references.

11. (Original) The method of claim 7 wherein the step of examining each program line in said second program to determine if it negates the possibility of combining programs, comprises the step of determining if there is a texture reference that is dependent upon an output of said first program and said texture reference is located at coordinates stored in a register.

12. – 26. (Cancelled)

27. (Previously amended) A computer-readable medium having computer executable instructions for performing the steps of:

determining whether an output buffer of said first node will comprise data that is similar to an input texture of said second node;

examining each program line in said second node to determine if it negates the possibility of combining nodes; and

editing program code to replace any first-node-texture references with a single pixel, where a first-node-texture reference is a reference in the second node's code to a texture that would have been created by the first node.

28. (Currently amended) A computer-readable medium having computer executable instructions for performing the steps of:

determining whether an output of the first fragment program represents relevant pixels that are the same pixels represented by an input of the second fragment program;

examining each program line in said second program to determine if it negates the possibility of combining said two programs; and

~~to determine if it negates the possibility of combining said two programs; and~~

editing program code to replace at least one texture reference with a register reference.